

IN THE CLAIMS:

Please amend the claims as follows:

20. (amended) A method of growing a biaxially oriented crystalline formation comprising the steps of:

B4 (a) contacting a previously formed non-single-crystal orientable structure with an oblique particle beam, thereby forming in said structure a nucleating surface having increased biaxial orientation; and

(b) epitaxially growing said crystalline formation using said nucleating surface to promote the epitaxial growth.

B5 25. (amended) The method of claim 23, wherein the composition of said crystallizable layer is selected from the group consisting of $\text{REBa}_2\text{Cu}_3\text{O}_{7-\delta}$ (where RE is a rare earth or yttrium, and δ is greater than 0 and less than 0.5), Bi-Sr-Ca-Cu-O, Ti-Ba-Ca-Cu-O, SrTiO_3 , Y_2O_3 , RuO_2 , ZrO_2 , SiO_2 , yttria-stabilized zirconia (YSZ), CeO_2 , Al_2O_3 , Si, Ge, InP, GaSb, InSb, GaAs, InAs, (In,Ga)As, CdS, LaMnO_3 , Fe, NiO, Co, Ni, SiC, TiN, diamond, diamond-like coatings, ZnO, and lead-zirconite-titanate.

B6 30. (amended) The method of claim 28, wherein the composition within the body of said structure is selected from the group consisting of $\text{REZ}_2\text{Cu}_3\text{O}_{7-\delta}$ (where RE is a rare earth or yttrium, Z is an alkaline earth element, and δ is greater than 0 and less than 0.5), Bi-Sr-Ca-Cu-O, Ti-Ba-Ca-Cu-O, SrTiO_3 , Y_2O_3 , RuO_2 , ZrO_2 , SiO_2 , yttria-stabilized zirconia (YSZ), CeO_2 , Al_2O_3 , Si, Ge, InP, GaSb, InSb, GaAs, InAs, (In,Ga)As, CdS, LaMnO_3 , Fe,

Blend NiO, Co, Ni, SiC, TiN, diamond and diamond-like coatings, ZnO, and lead-zirconite-titanate.

Please add the following new claims:

35. The method of either of claims 1, 2, 20 or 33 wherein two particle beams are used.

36. The method of either of claims 1, 2, 20 or 33 wherein a plurality of particle beams are used.

37. The method of either of claims 1, 2, 20 or 33 wherein multiple particle beams are used.

38. The method of either of claims 1, 2, 20 or 33 wherein the particle beam is moved during bombardment.

39. A method of contacting a structure with an oblique particle beam comprising:
contacting said structure with an oblique particle beam having a first component;
whereby the first component is deposited into the structure.

40. The method of claim 39 wherein the first component is zirconia.

41. The method of claim 40 wherein multiple particle beams are used.

Byind 42. The method of either of claims 1, 2, 20, 33 or 39 wherein the oblique particle beam comprises one or more charged or uncharged particles selected from the group consisting of O₂, Ar, N₂, Ne and He.
